

TRANSMITTAL OF APPEAL BRIEF (Small Entity)

Docket No.
HWE-107A/0247-5
AFTR

In Re Application Of: Harry W. Eberle, III

AUG 27 2007

PATENT & TRADEMARK OFFICE

Application No.	Filing Date	Attorney or Agent Name	Customer No.	Group Art Unit	Confirmation No.
10/037,325	January 3, 2002	Ernesto Garcia	000025901	3679	5841

Invention:

DECKING SYSTEM AND ANCHORING DEVICE

COMMISSIONER FOR PATENTS:

Transmitted herewith is the Appeal Brief in this application, with respect to the Notice of Appeal filed on:

May 25, 2005, further in response to the Notification of Non-Compliant Appeal Brief dated July 24, 2007

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- Applicant claims small entity status. See 37 CFR 1.27

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Dated: August 24, 2007

Ernest D. Buff, Esq.
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Attorney Docket No.: 0247-5 AF

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Harry W. Eberle, III Group Art Unit: 3679
Serial No.: 10/037,325 Examiner: Ernesto Garcia
Filed: January 3, 2002
For: **DECKING SYSTEM AND ANCHORING DEVICE**
Old Docket No.: HWE-107A
Docket No.: 0247-5

August 24, 2007
Bedminster, NJ 07921

Board of Patent Appeals and Interferences
United States Patent and Trademark Office
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

SUBSTITUTE APPEAL BRIEF

This Substitute Appeal Brief is submitted in response to the Notification of Non-Compliant Appeal Brief under 37 CFR 41.37 dated July 24, 2007.

In the aforementioned Notification, the Appeal Brief dated April 10, 2007 was deemed to be non-compliant with the requirements of 37 CFR 41.37. More specifically, it was indicated that: (i) Section (V) of the brief needed to include a mapping of the independent claims individually to associate references in the specification by page and line numbers and in the drawings by reference character; (ii) an explanation of the dependent claims should not be included in Section (V) of the

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brief unless a claim contained a means-plus-function recitation; (iii) explanation of features not recited in the independent claims should not be included; (iv) content in the paragraph bridging pages 14-15 was not proper for the Summary of Claimed Subject Matter Section (V) and should be deleted; (v) the ground of rejection headings in Argument Section (VII) were not proper, the ground of rejection merely being set forth in bold font in each section of the discussion; and (vi) Section XII as presented was not permitted.

It is respectfully submitted that each of the foregoing objections has been cured in the present Substitute Appeal Brief.

In particular, Section V – Summary of Claimed Subject Matter now recites the subject matter each of pending independent claims 29 and 33 and provides references to pertinent parts of the specification teaching and drawing figures that provide representative disclosure and antecedent basis for each claim feature. Discussion of the dependent claims has been omitted from Section (V), there being no claim features delineated in means-plus-function or step-plus-function form of 35 USC 112, sixth paragraph. The content formerly in the paragraph bridging pages 14-15 has been removed. The ground of rejection headings in Section (VII) have been amended to include the statutory basis for each rejection and the pertinent art applied. Section XII has been removed.

Argument Section (VII) has been amended in view of the Supreme Court's ruling in *KSR v. Teleflex*, 127 S. Ct. 1727, 1741; 167 L. Ed. 2d 705; 2007 U.S. LEXIS 4745; 75 U.S.L.W. 4289; 82 U.S.P.Q.2D (BNA) 1385; (S. Ct. 2007), which was issued

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subsequent to the April 10, 2007 filing date of appellant's previous submission of the present Appeal Brief and which pertains to the determination of obviousness under 35 USC 103(a), and under which some of the pending claims in the instant application were rejected.

Applicant respectfully submits that the any deficiencies of the previous Appeal Brief have been cured in the present Substitute Appeal Brief, which is thus submitted to be compliant with the requirements of 37 C.F.R. §41.37. Applicant is not aware of any other response that is now outstanding.

Applicant submits that no additional fees are due for the filing of the present Substitute Appeal Brief. However, should any additional fees be deemed necessary in connection with the present submission, authorization is given to charge Deposit Account No. 50-3832.

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(I) Real Party in Interest

The real party in interest is Harry W. Eberle, III, the inventor of the present invention.

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(II) Related Appeals and Interferences

There are no other appeals or interferences in related applications known to the appellant or to the appellant's legal representative, which will directly affect or be directly affected by, or have a bearing on, the Board's decision in the pending appeal.

(III) Status of Claims

The claims on appeal are claims 29-38, which were finally rejected in the Office Action dated December 29, 2004. A copy of these claims is set forth in Section IX – Claims Appendix.

Originally-filed claims 1-9 and subsequently added claims 21-28 have been cancelled during prosecution.

Originally-filed claims 10-20 stand withdrawn as being directed to a different invention.

Claims 29, 31, and 32 stand finally rejected under 35 U.S.C. §102(b) as being anticipated by Great Britain Patent Publication GB 1,350,754.

Claims 33 and 35-38 stand finally rejected under 35 U.S.C. §102(e) as being anticipated by US Patent 6,363,677 to Chen et al.

Claim 29 stands finally rejected under 35 U.S.C. §103(a) as being unpatentable over by US Patent 5,704,181 to Fisher et al.

Claim 30 stands finally rejected under 35 U.S.C. §103(a) as being unpatentable over Fisher et al. in view of US Patent 6,442,908 to Naccarato et al.

Claim 33 stands finally rejected under 35 U.S.C. §103(a) as being unpatentable over US Patent 556,998 to Major in view of Fisher et al.

Claim 34 stands finally rejected under 35 U.S.C. §103(a) as being unpatentable over Major in view of Fisher et al. and further in view of Naccarato et al.

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(IV) Status of Amendments

The claim listing set forth in Section IX reflects the pending claims, i.e. claims 29-38, which were presented by way of applicants' amendment under 37 CFR §1.111 that was submitted on October 14, 2004. Entry of these claims was confirmed by the Office Action dated December 29, 2004, wherein claims 29-38 were finally rejected.

Applicant's Amendment under 37 CFR 1.116, submitted on May 24, 2005, and including two amended drawing sheets bearing Figs. 1-8, was not entered, the required fee for a petition for an extension of time to respond to the rejection of December 27, 2004 having not been timely paid.

(V) Summary of Claimed Subject Matter

Independent claims 29 and 33 are pending in the present application, along with claims 30-32 dependent on claim 29 and claims 34-38 dependent on claim 33.

A. Independent claim 29.

Independent claim 29 is directed to an anchoring device for joining three boards. The device consists essentially of: (i) a substantially flat horizontal top element; (ii) at least one substantially vertical support member; and (iii) a substantially flat horizontal bottom element. The top element has an imaginary center line and a top view configuration which includes two sides, and it has a first predetermined width as measured side to side at a maximum width. The at least one substantially vertical support member is attached to an underside of the top element along the imaginary center line of the top element. The vertical support member extends downwardly from the top element for a predetermined length. The vertical member has two sides and a second predetermined width as measured side to side at a maximum width. The bottom element has a flat bottom view configuration which includes two sides and a generally trapezoidal shape, and it has a third predetermined width as measured side to side at a maximum width at a trapezoidal base. Page 22, line 3, through page 23, line 7. The first predetermined width is greater than both the second predetermined width and the third predetermined width; the third predetermined width is greater than the second predetermined width. Page 23, lines 8-12.

The anchoring device is adapted to maintain the top element in a predetermined position during use for joinder of two adjacent boards which have been pre-cut with receiving slots, and to position the bottom element upon a support board which the two adjacent boards rest for attachment of the anchoring device to the support board for anchoring and support of the two adjacent boards. Page 23, line 12, through page 24, line 5. The anchoring device is made of molded plastic material capable of having a metal fastener driven therethrough. Page 24, lines 14-16.

One possible and representative embodiment of the anchoring device delineated by independent claim 29 is depicted by Figs. 1-3 of the instant application, which respectively show top, front-side, and end views of anchoring device 1 of the invention. For convenience, these figures are reproduced below.

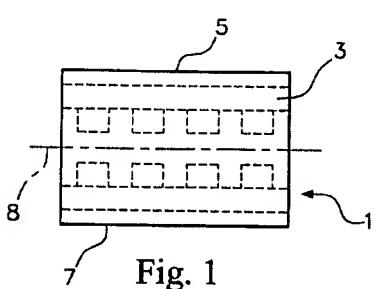


Fig. 1

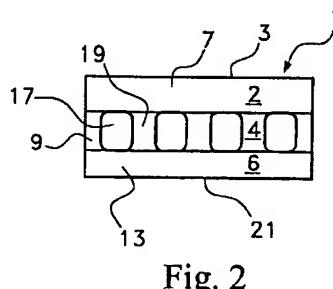


Fig. 2

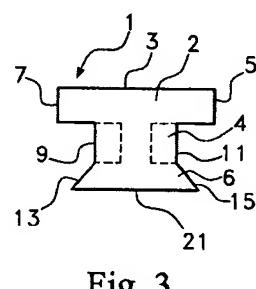


Fig. 3

(USSN 10/037,325)

As set forth at page 27, lines 7-15, anchoring device 1 of this embodiment includes a top element 2 having a flat top surface 3 having a top view configuration. As shown, the top view configuration incorporates a shape that is generally rectangular including two sides defined by parallel walls 5 and 7. The top element 2 has a first predetermined width, measured side to side at its maximum width (page 29, lines 10-

12), and denoted by Fig. 4 as W_T . Page 29, line 11.¹ A vertical support member 4 extends downwardly from the bottom surface of top element 2 and is attached along an imaginary center line (page 22, lines 10-13) of surface 3 (page 28, lines 5-7) denoted as imaginary attachment line 8 in Fig. 1. Vertical support member 4 has a second predetermined width measured side to side at its maximum width (page 29, lines 12-14) and denoted as W_M in Fig. 4. Substantially flat bottom element 6 has a substantially flat horizontal bottom surface 21 providing a flat bottom view configuration that includes tapered side walls 13 and 15. Bottom element 6 also has a third predetermined width measured at its respective maximum width (page 28, lines 13-15; page 29, lines 14-16) and denoted as W_B in Fig. 4. The vertical dimensions of anchoring device 1 permit the device to be placed on a floor joist with the sides of top element 2 thereby being located at a height permitting them to engage receiving slots in the horizontal beams that form the deck surface (page 28, line 15 to page 29, line 5; page 23, line 15 to page 24, line 5; Fig. 7). The thickness and width of top element 2 are selected to provide a suitable slip fit into the receiving slots of the horizontal beams (page 25, lines 6-10; slots 55, 57 of Fig. 7). As shown by the relative dimensions apparent from Fig. 4, first predetermined width W_T is greater than the third predetermined width W_B which, in turn, is greater than second predetermined width W_M .

Anchoring device 1 is constructed of a plastic material through which metal fasteners may be driven whereby the anchoring device is directly attached to a joist

¹ Denoted as W_{TB} in the originally filed specification and corrected to W_T for consistency with Fig. 4, in the amendment dated September 12, 2003.

beam and secure anchorage of the deck surface members is provided (page 24, lines 12-16; page 32, lines 1-4; page 24, lines 1-5).

B. Independent claim 33.

Independent claim 33 recites a decking system that comprises a plurality of decking boards and an anchoring device, which is of the type recited by claims 29-32 (page 25, lines 1-3). Each of the decking boards has a top, a bottom, two sides, and two ends, and at least one groove located along one of the sides (page 25, lines 3-5). The groove is adapted to receive the anchoring device (page 25, lines 8-10).

One possible and representative embodiment of such a decking system, including the required anchoring device, is depicted by Fig. 7 of the instant specification, which is reproduced below for convenience.

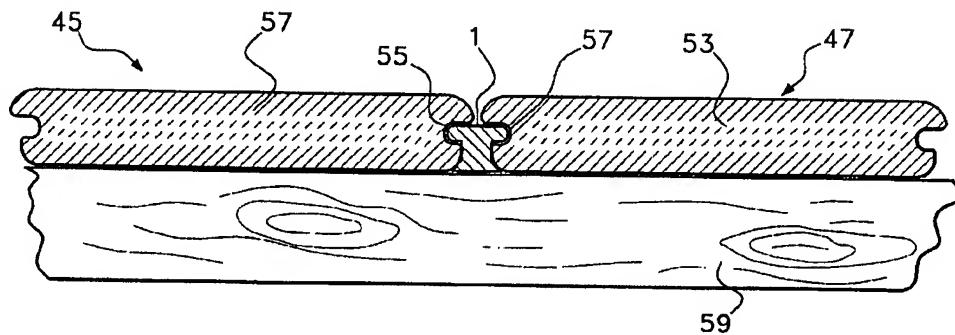


Fig. 7

(USSN 10/037,325)

As set forth by the specification, e.g. at page 31, line 14 to page 32, line 7, and Fig. 7, a plurality of decking boards, such as first and second horizontal beams

45 and 47, are secured to joist beam 59 using anchoring device 1. Claim 33 delineates an anchoring device having the same features and support as the device recited by claim 29, which is described by the specification as set forth above (see also page 26, line 14, through page 27, line 1). Each decking board has a top, a bottom, and two sides as apparent from the end view of Fig. 7. The boards also have two ends (not shown in Fig. 7). Slots 55 and 57 may be pre-cut in the respective sides of beams 45 and 47 (page 29, lines 3-5).

The anchoring device of the claim 33 decking system is configured such that it can maintain the top element in a predetermined position during use for joinder of two adjacent boards which have been pre-cut with receiving slots, and to position the bottom element upon a support board which the two adjacent boards rest for attachment of the anchoring device to the support board for anchoring and support of the two adjacent boards. This disposition is attained, as shown by Fig. 7, in an installation accomplished by placing first beam 45 atop joist beam 59, inserting a side of anchoring device 1 into slot 55, and securing anchoring device 1 to joist beam 59 by driving a fastener through device 1 into joist beam 59 (page 31, line 14 to page 32, line 7). Thereafter, beam 47 is placed alongside beam 45 atop joist beam 59, and slid so that the side of anchoring device 1 opposite beam 45 engages slot 57 (page 32, lines 8-13).

None of appellant's pending claims employs means-plus-function or step-plus-function language of the type contemplated by 35 USC 112, sixth paragraph.

(VI) Grounds of Rejection To Be Reviewed on Appeal

- (A) Whether claims 29, 31, and 32 should be rejected under 35 U.S.C. §102(b) as being anticipated by Great Britain Patent Publication GB 1,350,754;
- (B) Whether claims 33 and 35-38 should be rejected under 35 U.S.C. §102(e) as being anticipated by US Patent 6,363,677 to Chen et al.;
- (C) Whether claims 29 should be rejected under 35 U.S.C. §103(a) as being unpatentable over US Patent 5,704,181 to Fisher et al.;
- (D) Whether claim 30 should be rejected under 35 U.S.C. §103(a) as being unpatentable over Fisher et al. in view of US Patent 6,442,908 to Naccarato et al.;
- (E) Whether claim 33 should be rejected under 35 U.S.C. §103(a) as being unpatentable over US Patent 556,998 to Major in view of Fisher et al.; and
- (F) Whether claim 34 should be rejected under 35 U.S.C. §103(a) as being unpatentable over Major in view of Fisher et al. and further in view of Naccarato et al.

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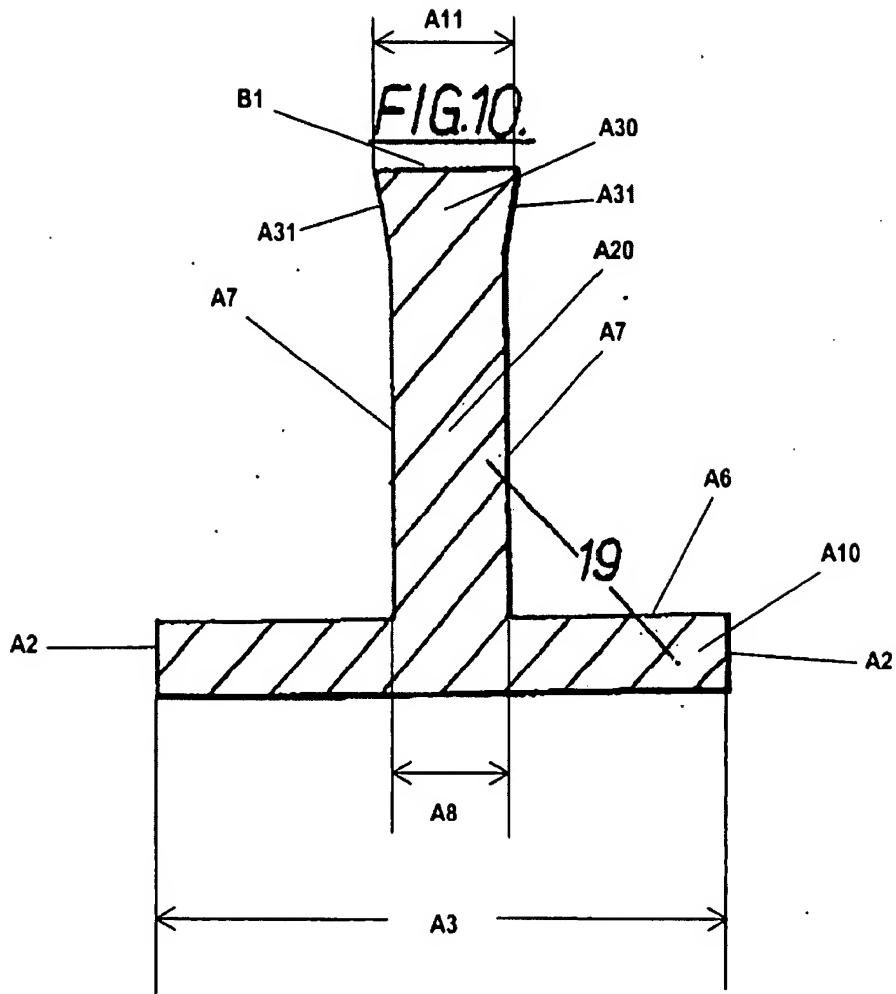
(VII) Arguments

A. The anchoring device of claims 29, 31, and 32 meets the conditions for patentability, and should not be subject to rejection under 35 U.S.C. §102(b) as being anticipated by Great Britain patent GB 1,350,754.

The Examiner has rejected claims 29, 31, and 32 under 35 U.S.C. §102(b) as being anticipated by Great Britain patent GB 1,350,754 ("the British patent") on the following basis:

Claims 29, 31 and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Great Britain patent, GB-1,350,754 (see marked-up attachment). (Office Action of December 29, 2004, page 3, first paragraph.)

For the convenience of the Board, a copy of Figure 10 of the British patent, including the aforementioned markings added by the Examiner and furnished as page 15 of the Office Action of December 29, 2004, is reproduced below.



(GB 1,350,754, as annotated by the Examiner)

The British patent relates to the mounting of ceramic tiles on walls and similar substantially upright surfaces, and on floors and similar horizontal surfaces. The tiles are secured in position by a fixative preparation coated on the back surfaces of the tiles that adheres them to an underlying surface (page 1, col. 1, lines 11-16). In a conventional installation process, the fixative is allowed to attain strength, and thereafter a grouting medium is fed into the joints between adjacent tiles to fill up the

joint spaces and provide a satisfactory finished appearance to the tiled surface (lines 17-27).

Thus, the invention delineated by the British patent is said to "consist in a single square or oblong tile for mounting in position...and having already affixed to it before being so mounted a preformed grouting strip along one or two edges only of the tile and visible from the face of the tile, the arrangement being such that when the tile with the grouting strip or strips affixed to it is mounted in position the grouping strips serve to space adjacent tiles apart by a predetermined distance." Page 1, lines 39-50 (bridging cols. 1-2), emphasis added.

1. Independent claim 29 meets the conditions for patentability because the British patent does not disclose or suggest the anchoring device of claim 29.

Further with respect to claim 29, and referring to reference designations superimposed on original Fig. 10, the Examiner provides the following basis for his rejection:

Regarding claim 29, the British patent discloses, in Figure 10, an anchoring device consisting essentially of a substantially flat horizontal top element A10, at least one substantially vertical support member A20, and a substantially flat horizontal bottom element A30. The top element A10 has a top view configuration including two sides A2 and a predetermined first width A3 as measured side to side. The first width A3 is measured at a maximum width between the sides A2. The top element A10 has an imaginary center line A4. The support member A20 is attached to an underside A6 of the top element A10 along the center line A4² and the support member A20 extends downwardly therefrom. The support member A20 has two sides A7 and a predetermined second width

² *Sic* – Appellant is unable to locate any designation of A4 in the Examiner's annotations of Fig. 10 of the British patent.

A8 as measured side to side at a maximum width. The bottom element A30 has a flat bottom view configuration, which includes sides A31 and having a generally trapezoidal shape, and a predetermined third width A11 as measured side to side at a maximum width at a trapezoidal base B1. The first width A3 is greater than the second width A8 and the third width A11. The third width A11 is greater than the second width A8. The device is made of molded plastic material (column 4, lines 72-84). (Office Action of December 29, 2004, page 3, second paragraph.)

Applicant respectfully traverses the Examiner's contention that the British patent discloses every structural feature of the anchoring device delineated by claim 29, as would be required for a proper rejection under 35 USC §102(b).

More specifically, applicant maintains that a person having ordinary skill would not regard the British patent as having disclosed applicant's anchoring device, within the meaning of that term as used in the instant application. As set forth above, the allegedly anticipatory article of the British patent, e.g. as depicted by Fig. 10 thereof, is denominated a "preformed grouting strip." The function of this strip is said to be spacing the tiles apart by a predetermined distance (col. 2, lines 46-50) and to assist in forming a seal between adjacent tile edges or another grout strip (col. 2, lines 69-71). There is no disclosure or suggestion that the strip plays any role in anchoring the ceramic tiles with which it is associated to a wall or floor surface, or even that the grouting strip could be used in such a manner. Instead, that anchoring function is provided in the British patent's system by a fixative disposed between the back surface of the tiles and the surface (e.g. wall or subfloor) to which the tile is applied. Page 1, col. 1, lines 17-21.

The preformed grouting strip of the British patent also extends at least over substantially the full edge length of each tile, (page 1, col. 1, line 44 – "along one

or two edges only") as required to perform its grouting and sealing functions (col. 2, lines 69-71). On the other hand, a person having ordinary skill in the art of deck construction would recognize that applicant's anchoring device would not and could not be formed with a length corresponding to the full length of each decking board or even a substantial fraction thereof, because it would not function properly for its intended use if it extended to that length. Decking is typically installed in a location that exposes it to the elements, including rain, snow, and other sources of water. The decking is installed with intervening gaps separating adjacent boards. Accumulated moisture and debris may drain through these gaps. An anchoring device of extended length would effectively seal the space between adjacent decking boards, thereby preventing this drainage. Indeed, the British patent expressly teaches such a sealing function. A person of ordinary skill in the art would thus regard a device having the extended length of the British patent's grouting strips as not being an anchoring device for attaching decking boards to a support board. Conversely, the skilled artisan would not regard applicant's anchoring device as performing the grouting and sealing function of the British patent's strips.

In *Motorola, Inc. v. Interdigital Tech. Corp.*, the Federal Circuit established boundaries governing anticipatory prior art:

"For a prior art reference to anticipate a claim, the reference must disclose each and every element of the claim with sufficient clarity to prove its existence in the prior art. *See In re Spada*, 911 F.2d 705, 708, 15 USPQ2d 1655, 1657 (Fed. Cir. 1990) ('[T]he [prior art] reference must describe the applicant's claimed invention sufficiently to have placed a person of ordinary skill in the field of the invention in possession of it.' (citations omitted)). Although this disclosure requirement presupposes the knowledge of one skilled in the art of the claimed invention, that presumed knowledge does not grant a license to read into the prior art reference teachings that are not

there.” 121 F.3d 1461, 43 USPQ2d 1481, 1490 (Fed. Cir. 1997) (emphasis added)

See also *Scripps Clinic & Research Found. v. Genentech Inc.*, 927 F.2d 1565, 18 USPQ2d 1001, 1010 (Fed. Cir. 1991), in which the Federal Circuit held that “There must be no difference between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention” (emphasis added). Appellant respectfully submits that the foregoing remarks clearly establish the existence of structural differences of the sort that the *Scripps* court envisioned. In addition, the attempt to cast the grouting strips of the British patent as being anchoring strips equally violates the *Motorola* court’s prohibition against reading subject matter into the reference that is not fairly disclosed therein.

Appellant further submits that the preformed grouting material strip of the British patent and the anchoring device would even be properly distinguished under the standard articulated in *Union Oil Co. of Cal. v. Atlantic Richfield et al.*, 208 F.3d 989, 994, 54 USPQ2d 1227 (Fed. Cir. 2000) (holding that a claim reciting, in its preamble, “An unleaded gasoline suitable for combustion in an automotive engine” covered a fuel that would regularly be used in autos, not that conceivably could be, thereby excluding from claim scope a broader class of petroleum formulations such as aviation fuels or racing fuels).

In the present instance, it is respectfully submitted that the preformed grouting material strip of the British patent and the anchoring device of claim 29 would be regarded by a person having ordinary skill in the art as having material structural differences inherent in their different functions, implicating the *Union Oil* standard. On

the other hand, the Examiner's contention that the preformed grout material strip can be identified as an anchoring device contravenes these standards.

The Examiner has discounted applicant's claim recitation with respect to the terminology "adapted to" as follows:

Applicant is reminded that the recitation that an element is "adapted to" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138. Therefore, the anchoring device can be adapted to maintain the top element in a predetermined position during use for joinder of two adjacent boards pre-cut with receiving slots, and to position the bottom element upon a support board, which the two boards rest for attachment of the anchoring device to the support board for anchoring and support the two boards. (Office Action of December 29, 2004, page 3, last two lines through page 4, line 6.)

Applicant respectfully maintains that the Examiner's reliance on *In re Hutchison*, 33 CCPA 879, 154 F.2d 135, 69 USPQ 138 (CCPA 1946), for the *per se* proposition that a claim feature recited using "adapted to" terminology carries no patentable weight, is erroneous.

First, the "adapted to" feature that the *Hutchison* court found to carry no weight was recited in the claim preamble. *Id.* at 154 F.2d 138. By way of contrast, the features the Examiner has disregarded are recited using such phraseology in the body of applicant's claims 29 and 33. These "adapted to" limitations are no mere statements of intended use, but rather are structural limitation, albeit recited in functional language.

Second, rulings of the Court of Claims and Patent Appeals and of its successor Federal Circuit subsequent to *Hutchison* expressly recognize functional language as carrying patentable moment defining claim scope. See, e.g., *In re Land and Rogers*, 54 CCPA 806, 368 F.2d 866, 151 USPQ 621, 635-636 (CCPA 1966), (holding

that a feature recited using “adapted to” terminology was admittedly “functional” but provided no good ground for giving it “no weight” in view of the third paragraph of 35 U.S.C. 112.)

Applicant further points to the C.C.P.A.’s decision in *In re Venezia*, 530 F.2d 956, 189 U.S.P.Q. 149 (CCPA 1976), in which “adapted to” terminology was specifically recognized as conveying structural and dimensional limitations for a claim element. In particular, the court addressed a claim that recited “a pair of sleeves ... each sleeve of said pair adapted to be fitted over the insulating jacket of one of said cables.” The Court ruled that:

“Rather than being a mere direction of activities to take place in the future, this language imparts a structural limitation to the sleeve. Each sleeve is so structured or dimensioned that it can be fitted over the insulating jacket of a cable. A similar situation exists with respect to the ‘adapted to be affixed’ and ‘adapted to be positioned’ limitations in the third and fourth paragraphs of the claim.” *Id.* at 530 F.2d 959, 189 U.S.P.Q. 151-152.

Similar approbation of functional limitations in an apparatus claim is given in *R.A.C.C. Indust., Inc. v. Stun-Tech, Inc.*, 178 F.3d 1309, 1998 WL 834329, slip. op. at 3, 4, (Fed. Cir. 1998), citing *Intel Corp. v. U.S. Int'l. Trade Comm.*, 946 F.2d 821, 832, 20 USPQ2d 1161, 1171 (Fed. Cir. 1991). The *Intel* court held that functional language in an apparatus claim required that an accused apparatus possess the capability of performing the recited function; and that functional language properly limited the scope of claims to devices that had the recited *capability* (emphasis supplied in the *R.A.C.C.* decision).

In light of such holdings, it is submitted that the Examiner’s failure to give patentable weight to the features of claims 29 and 33 recited using “adapted to”

terminology is legal error. In particular, claim 29 calls for the anchoring device to be adapted to “maintain said top element in a predetermined position during joinder of two adjacent boards... and to position said bottom element upon a support board which said two adjacent boards rest...” Claim 33 similarly recites such an anchoring device and further calls for decking boards having grooves in at least one side, the grooves being adapted to receive the anchoring device.

Applicant maintains that the foregoing functional limitations in fact positively recite structural limitations that distinguish the anchoring device of claim 29 from any article disclosed or suggested by the British patent. There is no disclosure whatsoever in the British patent that width A8 of top element A10 is shaped and dimensioned so as to permit it to be received in a groove of any tile or other article. Significantly, Fig. 10, which the Examiner has cited, is said to be of a T-section strip appointed for use with a plain-edge tile, i.e., a tile lacking any edge groove or other like feature corresponding to the receiving slots delineated by claims 29 and 33. Page 2, col. 1, lines 11-13 and 40-43. Horizontal projections A2 of “top element” A10 are not received in any slot. Instead, element A10 is installed with its horizontal projection A2 underneath the back surface of each tile, and with the plain edge of each tile abutting sections A7 and A31 on each side of grouting strip 19.

Although not specifically referenced by the Examiner, other tile forms disclosed by the British patent have recesses that are not grooves, but instead extend through the back surface of the tile and permit an interlocking connection. See, e.g., Figs. 7-8, showing recesses 17b appointed to receive ear-like or bead-like projections

18a from a grouting strip 18. On the other hand, there is no disclosure of any tile or the like having a pre-cut receiving slot, as recited by claims 29 and 33. Applicant thus maintains that the Examiner has improperly read into the British patent features that are not fairly disclosed therein. Specifically it is submitted that without warrant, he has read into the British patent the particular shape and dimensions of features of applicant's anchoring device. These features, which are delineated by claims 29 and 33 using "adapted to" terminology, render the anchoring device capable of carrying out the disclosed anchoring function and thus represent a distinction predicated on novelty and patentability.

2. Dependent claims 31 and 32 meet the conditions for patentability because the British patent does not disclose or suggest the anchoring device of claim 29, let alone the preferred anchoring device of claims 31, and 32, which depend from claim 29.

Further with respect to claims 31 and 32, the Examiner has provided the following statement of rejection:

Regarding claim 31, the two sides A2 of the top element A10 are symmetric relative to one another. Regarding claim 32, the two sides A2 of the top element A10 are parallel to one another. (Office Action of December 29, 2004, page 3, third and fourth paragraphs.)

Applicants respectfully submit that claims 31 and 32 are patentable for at least the same reasons as claim 29, from which they depend, and that the foregoing

statement does not cure the lack of disclosure or suggestion of the subject matter of claim 29, as set forth hereinabove.

3. Conclusion.

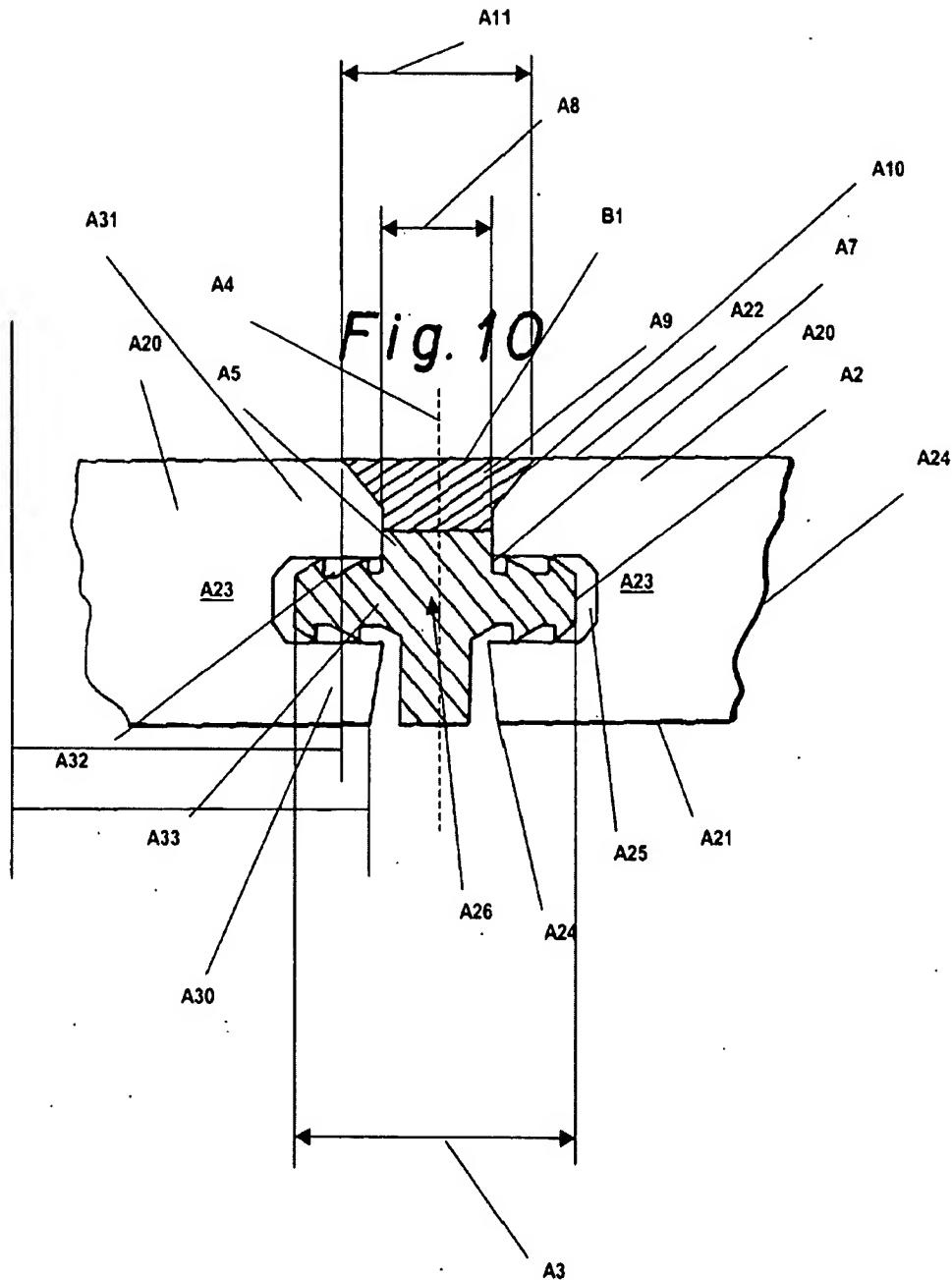
In view of the foregoing remarks, it is submitted that present claims 29, 31, and 32 patentably define over the British patent. Accordingly, reversal of the rejection of claims 29, 31, and 32 under 35 USC §102(b) as being anticipated by the British patent is respectfully requested.

B. The decking system of claims 33 and 35-38 meets the conditions for patentability, and should not be subject to rejection under 35 U.S.C. §102(e) as being anticipated by US Patent 6,363,677.

The Examiner has rejected claims 33 and 35-38 under 35 U.S.C. §102(e) as being anticipated by US Patent 6,363,677 to Chen et al. on the following basis:

Claims 33 and 35-38 are rejected under 35 U.S.C. 102(e) as being anticipated by Chen et al., 6,363,677 (see marked-up attachment). (Office Action of December 29, 2004, page 4, last paragraph.)

For the convenience of the Board, a copy of Figure 10 of Chen et al., including the aforementioned markings added by the Examiner and furnished as page 16 of the Office Action of December 29, 2004, is reproduced below.



(Chen et al., US Patent 6,363,677, as annotated by the Examiner)

Chen et al. is directed to a surface covering system which involves a series of interconnected tiles having a spline system located between the tiles to simulate the appearance of a grout. Each tile is said to have on its sides at least one

tongue section and at least two groove sections. When installed, a tongue of one tile engages one of the grooves of an adjacent tile, thereby forming a gap at at least the upper surfaces between the tiles. Two types of splines are used. A first spline, having two tongue sections for interconnecting with the groove section(s) of at least one tile is inserted between a series of tiles. A second spline capable of fitting into the gap formed between two or more tiles, which are interconnected at a tongue of a first tile and a groove of a second tile is further used. See Abstract.

The foregoing interconnections are readily visualized with reference to Figs. 5(a) and 5(b) of Chen et al., which are reproduced below for convenience. Fig. 5(a) shows two adjacent tiles 50 and 52 having grooves in facing relationship. First spline 54 has oppositely projecting tongues that engage the corresponding grooves of tiles 50, 52. See, e.g., col. 3, line 66 *et seq.* Second spline 56 fills the gap above first spline 54 which is established by full engagement of first spline 54 with tiles 50 and 52. Fig. 5(b) shows the engagement of the sides of tiles wherein the tongue of one tile mates with the groove of the adjacent tile. On this side, only second spline 56 is used. It fills the gap above the engaged tongue and groove.

Fig. 5(a)

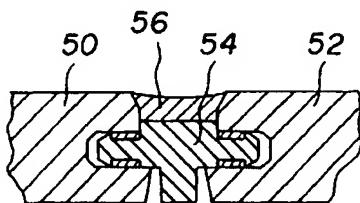
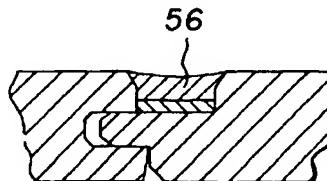


Fig. 5(b)



(Chen et al., US Patent 6,363,677)

1. Independent claim 33 meets the conditions for patentability because Chen et al. does not disclose or suggest the decking system of claim 33.

Further with respect to claim 33, the Examiner provides the following basis for his rejection:

Regarding claim 33, Chen discloses in Figure 5,³ a decking system comprising boards A20 and an anchoring device A26. Each of the boards A20 has a top A21, a bottom A22, two sides A23 and two ends A24. At least one groove A25 is located along one of the sides A23. The anchoring device A26 consists essentially of a substantially flat horizontal top element A1,⁴ at least one substantially vertical support member A5, and a substantially flat horizontal bottom element A9. The top element A1 has a top view configuration including two sides A2 and a predetermined first width A3 as measured side to side. The first width A3 is measured at a maximum width between the sides A2. The top element A1 has an imaginary center line A4. The support member A5 is attached to an underside A6 of the top element A1 along the center line A4 and the support member A5 extends downwardly therefrom. The support member A5 has two sides A7 and a predetermined second width A8 as measured side to side at a maximum width. The bottom element A9 has a flat bottom view configuration, which includes sides A10, and having a generally trapezoidal shape, and a predetermined third width A11 as measured side to side at a maximum width at a trapezoidal base B1. The first width A3 is greater than the second width A8 and the third width A11. The third width A11 is greater than the second width A8. The device is made of molded plastic material capable of having a metal fastener driven through (col. 7, lines 56-60). (Office Action of December 29, 2004, page 5, first paragraph.)

a. Chen et al. do not disclose every structural feature of the decking system of claim 33.

Appellant respectfully traverses the Examiner's contention that Chen et al. discloses every feature of the decking system delineated by claim 33. Significantly, the

³ *Sic* – the Examiner's annotations, including reference number designations, were made with specific reference to Fig. 10, not Fig. 5.

⁴ *Sic* – the reference designation of A1 does not appear in Fig. 10, as annotated by the Examiner.

Examiner has not pointed to any single structure that embodies the anchoring device included in the system of claim 33. Rather, the Examiner apparently has alleged that the combination of elements designated as first and second spline sections 54, 56 in Figs. 4(a) and 5(a) of Chen et al. constitutes such an anchoring device. As disclosed at col. 3, line 66 to col. 4, line 2, and confirmed by Figs. 5(a) and 10, these sections are clearly separate items, pictorially differentiated in the figures by distinct hatching. Importantly, second spline section 56 is usable independent of first section 54, e.g. in the Fig. 5(b) configuration.

Moreover, and contrary to the Examiner's contention, the combination of items 54 and 56, even if regarded, *arguendo*, as being a single structure, does not have the structure recited for the anchoring device employed in the decking system of claim 33.

The Examiner's contention that the decking system of claim 33 is disclosed by Chen et al. is specifically submitted to be untenable under the Federal Circuit's ruling in *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, that "Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim." 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1984) (emphasis added). Even if, *arguendo*, elements 54 and 56 collectively form an "anchoring device," they are not properly arranged in Chen et al., because they are inverted from the disposition recited by claim 33.

Applicant respectfully submits that a person having ordinary skill in the pertinent art would regard the use of the term “top” in regard to the anchoring device delineated by feature (II.) of claim 33 as being constrained by the use of the same word “top” in reference to the decking boards of feature (I.), both in accordance with ordinary construction practice. That is to say, decking, a type of floor construction, is universally regarded as being installed on “top” of, i.e., vertically above, support structure such as floor joists. The Examiner’s reading contravenes that usage. What the Examiner purports to be the anchoring device’s trapezoidal “base” (i.e., second spline section 56) is instead on the top of the flooring installation of Fig. 5(a) of Chen et al., while what the Examiner identifies as the “top” of the anchoring device is on the bottom of the actual floor. The skilled person would thus recognize the Chen et al. system as being arranged differently than the system delineated by claim 33, making the Examiner’s novelty rejection untenable.

Significantly, the ordering of widths of the elements of claim 33 required by the first “wherein” clause is not disclosed by Chen et al. The Examiner’s contention to the contrary relies on wresting the meaning of the ordinary language terms “top” and “bottom.”

The confusion arising from the Examiner’s inversion of the supposed anchoring device is further compounded by the Examiner’s characterization of the sides A2 as defining a width A3 of what he purports to be the top element A1 [*sic*]. On the other hand, claim 33 calls for an anchoring device having a “substantially flat horizontal top element having a top view configuration which includes two sides...”

(emphasis added). Applicant respectfully submits that the allegedly anticipatory structure does not have the substantially flat horizontal top view configuration delineated by claim 33. Instead, the portion of element 54 that extends downward from the projections received in board grooves A25 in the depiction of annotated Fig. 10 (the “top” of the Chen et al. structure as apparently understood by the Examiner⁵) precludes the Examiner’s conclusion, because it establishes a surface of element “A1” that is not substantially flat horizontally.

The presence of the aforesaid protrusion from the top surface is precluded from applicant’s claimed anchoring device by the use of the transitional phrase “consisting essentially of.” Such a protrusion would markedly change the functionality of the anchoring device, e.g. by interfering with the insertion of the metal fastener used to secure the three beams involved in the decking system.

The Examiner has discounted the use of the transitional phrase “consisting essentially of” in claim 33 as follows:

Furthermore, for the purposes of searching for and applying prior art under 35 U.S.C. 102 and 103, absent a clear indication in the specification or claims of what the basic and novel characteristics actually are, “consisting essentially of” will be construed as equivalent to “comprising”. See, e.g., PPG, 156 F.3d at 1355,48 USPQ2d at 1355. See MPEP 2111.03. (Office Action of December 29, 2004, page 6, second paragraph.)

In the present instance, appellant is unable to locate in the record any evidence suggesting that the Examiner made a determination of whether the

⁵ It is to be understood that the Examiner’s purported anticipation requires that combined elements 54 and 56 of Chen et al. be viewed in an inverted orientation. That is to say, in the depiction of Figs. 5(a) and 10, the feature supposed to correspond to the “top” of applicant’s anchoring device is toward to the bottom of the figures, and the supposed “bottom” is toward the top of the figures.

specification or claims established basic and novel characteristics of the claimed subject matter. Even less is there any indication that such characteristics have been applied in considering the appropriate understanding of the term “consisting essentially of” as it bears on the scope of claims 29 and 33. Appellant maintains that such a determination must be made for the broadened (“comprising”) meaning contemplated by MPEP §2111.03 to be appropriate and must be documented to permit appropriate appellate review of the propriety of the rejections. See *In re Lee*, 277 F.3d 1338, 1344-45, 61 USPQ2d 1430, 1435 (Fed. Cir. 2002) (holding that PTO must document its reasonings on the record to allow accountability and effective appellate review). The requirement for documented findings has been reaffirmed and underscored in *KSR v. Teleflex*, 127 S. Ct. 1727, 1741; 167 L. Ed. 2d 705; 2007 U.S. LEXIS 4745; 75 U.S.L.W. 4289; 82 U.S.P.Q.2D (BNA) 1385; (S. Ct. 2007).

Appellant respectfully draws attention to the portion of the Federal Circuit’s *PPG* ruling that is cited in MPEP §2111.03 and on which the Examiner has relied: “PPG could have defined the scope of the phrase ‘consisting essentially of’ for purposes of its patent by making clear in its specification what it regarded as constituting a material change in the basic and novel characteristics of the invention.” In the present instance, appellant respectfully submits that the intended claim scope is indeed apparent from the original specification and claims, and, *a fortiori*, in view of the file history.

Claims 29 and 33, as presented by way of the amendment dated October 14, 2004, employed the transitional phrase “consisting essentially of.” These claims

correspond generally to previous claims 21 and 24, respectively. New claims 29 and 33 recite verbatim the features of old claims 21 and 24, with the transitional term “comprising” replaced by “consisting essentially of,” along with the further inclusion of the feature of former dependent claims 23 and 26, which called for the anchoring device to be made of a molded plastic material. The newly presented claims employ “consisting essentially of” in one instance each, both referring to the anchoring device.

Appellant respectfully submits that the replacement of the open term “comprising” with the partially closed transitional phrase “consisting essentially of” in claims 29 and 33 clearly signals applicant’s understanding of claim scope, in accord with firmly established Patent Office practice: “The transitional phrase ‘consisting essentially of’ limits the scope of a claim to the specified materials or steps ‘and those that do not materially affect the basic and novel characteristic(s) of the claimed invention.’” MPEP §2111.03, quoting *In re Herz*, 537 F.2d 549, 551-52, 190 USPQ 461, 463 (CCPA 1976) (emphasis in original). Such usage, articulated long ago in *Ex parte Davis*, 80 USPQ 448, 450 (Pat. Off. Bd. App. 1948), has since been repeatedly affirmed. See, e.g., *AK Steel Corp. v. Sollac*, 344 F.3d 1234, 1239, 68 USPQ2d 1280 (Fed. Cir. 2003).

Significantly, applicant’s October 14, 2004 amendment addressed the rejection of claim 21 over Zibell by arguing that “Clearly Zibell has essential elements not in the present invention device, to wit, plural center post sections including component 78 of Figure 11 of Zibell, and the non-flat bottom of Zibell below the post section 78 of that Figure. Since all of the claims state that the device consists

essentially of the elements set forth in the claims, the rejection should be withdrawn”
(page 8, penultimate line *et seq.* of the October 14, 2004 Amendment).

Appellant respectfully submits that the specification and file history of the present application provide sufficient basis for understanding the ambit of the present claims. That is to say, the specification recites those basic and novel characteristics of the anchoring device that would be materially affected by the presence of elements in an embodiment that would be outside the scope of the claim, and thus excluded by use of the “consists essentially of” transitional phrase. For example, it is submitted that Chen et al. discloses a portion of element 54 extending downward from the projections received in board grooves A25 in the depiction of annotated Fig. 10 (the “top” of the Chen et al. structure as apparently understood by the Examiner⁶). The presence of such a portion establishes a surface of element “A1” that is not substantially flat horizontally. This non-flat surface takes the cited structure outside the scope of claims 29 and 33, the downwardly extending portion being excluded by the language of claims 29 and 33. To regard a structure having such a downward projection as being within the scope of applicant’s claims would vitiate the recitation of a “substantially flat horizontal top element” (Feature II(a)). Appellant thus maintains that the purported anticipation of claim 33 by any structure disclosed by Chen et al. is precluded.

⁶ See note [4] above concerning the inversion of the allegedly anticipatory Chen et al. structure.

b. The spline system of Chen et al. is not an anchoring device, as required by claim 33.

Like the supposed “anchoring” device of the British device discussed hereinabove in connection with the rejection of claims 29, 31, and 32, the Chen et al. multi-part spline system also is not an anchoring device. Nothing in the Chen et al. reference discloses or suggests that elements 54, 56 in combination be used in any manner to mutually secure three boards together, i.e., to secure two adjacent decking boards to a third support board. At best, the Chen et al. spline system attaches horizontally adjacent tiles, but nothing discloses or suggests the attachment of elements 54 or 56, whether singly or in combination, to an underlying support board, whereby the three boards are mutually secured. In fact, the Chen et al. reference is even devoid of any disclosure or suggestion that the tiles or splines used in the surface covering system be adhered in any way to an underlying support structure. On the other hand, it is known in the art that interlocking tiles, such as those of Chen et al., are often disposed as a flooring system in a “floating” manner, wherein no fixed attachment to the underlying support is used.

The Chen et al. reference further teaches that the spline system located between the tiles of the surface covering system “simulate[s] the appearance of grout.” Abstract, line 2. A person of ordinary skill in the surface covering art would recognize that grout is conventionally installed to visibly fill the gaps between adjacently installed tiles along the entire length of each side of the tiles. The importance of such filling is explicitly recognized, e.g. at col. 8, lines 26-30. As set forth hereinabove in connection

with the rejection of claims 29, 31, and 32 over the British patent, decking systems such as the instant system ordinarily are installed in exterior locations with gaps intentionally left between adjacent decking boards, to permit drainage of water, e.g. as the result of rain or snow falling onto the exposed surface. Were the spline system of Chen et al. to be used in constructing the present decking system, that drainage function would be thwarted. On the other hand, were applicant's anchoring devices used in conjunction with tiles of the type provided by Chen et al., the function of simulating grouting would be lost. Accordingly, applicant maintains that a person having ordinary skill would not regard Chen et al. as having disclosed every claimed structural feature of applicant's anchoring device and decking system. In addition, no motivation is established that would induce a skilled artisan to modify the spline system of Chen et al. to provide applicant's anchoring device.

Still further, nothing in the present specification suggests any anchoring device dimensioned such that the top surface of the device is at a level permitting it to simulate a grouted joint. Such a location is precluded, because the portions of the top surface distal from the center support are engaged in the decking boards' receiving slots, which inherently are below the top surface of the boards. Chen et al., on the other hand, employs the spline system to function as simulated grouting, requiring the top of the spline system to be substantially at or near the top surface of the tiles with which the splines are used.

2. Dependent claims 35 and 37 meet the conditions for patentability because Chen et al. does not disclose or suggest the decking system of base claim 33, let alone the preferred decking system of dependent claims 35 and 37.

With respect to claims 35 and 37, the Examiner provides the following bases for his rejection:

Regarding claim 35, the two sides A2 of the top element A1 are symmetric to one another. (Office Action of December 29, 2004, page 6, third paragraph.)

Regarding claim 37, the boards A20 are made of material selected from the group consisting of synthetic polymers, at least partially foamed synthetic polymers, wood, wood composite, and combinations thereof (col. 4, lines 22-50). (Office Action of December 29, 2004, page 7, first paragraph.)

It is respectfully submitted that the foregoing statements do not materially add any subject matter pertinent to the earlier statement of rejection of claim 33 over Chen et al. Accordingly, it is submitted that the subject matter of claims 35 and 37 is not disclosed or suggested by Chen et al., for at least the same reasons as claim 33, on which they both depend.

3. Dependent claim 36 meets the conditions for patentability because Chen et al. does not disclose or suggest the decking system of base claim 33, let alone the preferred decking system of dependent claim 36.

With respect to claim 36, the Examiner provides the following basis for his rejection:

Regarding claim 36, the groove A25 establishes an upper half A30 of each of the boards A20 above the groove A25 and a lower half A31 of each of the boards A20

below the groove A25. The upper half A30 has a greater width than the lower half A31. Compare widths A32 and A33. (Office Action of December 29, 2004, page 6, last paragraph.)

Appellant respectfully submits that the statement of rejection of claim 36 perpetuates the inversion of top and bottom discussed in detail in Section (VII) B.1.a. above with respect to the rejection of base claim 33 over Chen et al. While appellant agrees that features A23 establish an upper half and a lower half of the Chen et al. tiles, appellant emphatically disagrees that sections A30 and A31 can properly be regarded as respective “upper” and “lower” halves of tiles A20, which the Examiner has equated to applicant’s “boards.” Instead, it is submitted that “upper” and “lower” must be understood in light of the usage of the Chen et al. specification, wherein it is clearly indicated that the trapezoidal portion (56) of the combined spline system is installed at the level of the “upper” or “top” surface of each tile. Each Chen et al. tile is said to have a “top surface and a bottom surface.” Col. 4, line 3. A person having ordinary skill in the tiling art would indubitably regard grout, for which second spline 56 substitutes in the Chen et al. system, as being disposed on the finished side of an exposed tiled surface, i.e. the “upper” or “top” side of a tiled floor. Attention is further drawn to Chen’s claim 1, at col. 9, lines 56-57, which defines “a gap” as being formed on the “upper surface between the two tiles.” The second spline (e.g., element 56 of Figs. 4-6) is required to be “capable of fitting into said gap” (line 62). It is respectfully submitted that this recitation clearly defines Chen et al.’s usage of the terms “top,” “bottom,” “upper,” and “lower,” in direct contradiction to the Examiner’s reading, which requires inversion of top and bottom. There is no remotely plausible basis

established that suggests the Chen et al. decking system be installed upside-down from the ordinary sense conveyed by the depiction of the Figures, or that the Figures are to be regarded as being drawn in an inverted fashion. Such a reading is also plainly contraindicated by the Federal Circuit in *Multiform Desiccants, Inc. v. Medzam, Ltd.*, 133 F.3d 1473, 45 USPQ2d 1429, 1432 (1998) [holding that “the person of ordinary skill in the field of the invention ... is deemed to read the words used in the patent documents with an understanding of their meaning in the field, and to have knowledge of any special meaning and usage in the field. The inventor’s words that are used to describe the invention – the inventor’s lexicography – must be understood and interpreted by the court as they would be understood and interpreted by a person in that field of technology.”]

The Examiner contends that width A32 of tile portion A30 is wider than width A33 of tile portion A31. Appellant agrees. However, it is thus submitted that when the upper and lower halves of the Chen et al. tiles are properly identified, Chen et al. teaches a width ordering (A32 > A33) that is exactly opposite the requirement of claim 36, that upper-half board width (W_{TB} of Fig. 8) be greater than lower-half board width (W_{BB} of Fig. 8).

4. Dependent claim 38 meets the conditions for patentability because Chen et al. does not disclose or suggest the decking system of base claim 33, let alone the preferred decking system of dependent claim 38.

With respect to claim 38, the Examiner provides the following basis for his rejection:

Regarding claim 38, the two sides A2 of the top element A1 are parallel to one another. (Office Action of December 29, 2004, page 7, second paragraph.)

For the reasons set forth above in Section (VII) B.1.a. concerning the rejection of base claim 33, appellant maintains that sides A2 cannot properly be regarded as the sides of a substantially flat top element A1. Rather, because the downwardly projecting feature of first spline 54, and not feature A1, must be regarded as the “top” element of the purported anchoring device disclosed by Chen et al. given the Examiner’s definition in which “top” and “bottom” are inverted from their usual meaning.

5. Conclusion.

In view of the foregoing remarks, it is submitted that present claims 33 and 35-38 patentably define over Chen et al. Accordingly, reversal of the rejection of claims 33 and 35-38 under 35 USC §102(e) over Chen et al. is respectfully requested.

Applicant : Eberle
Serial No. : 10/037,325
Filed : January 3, 2002
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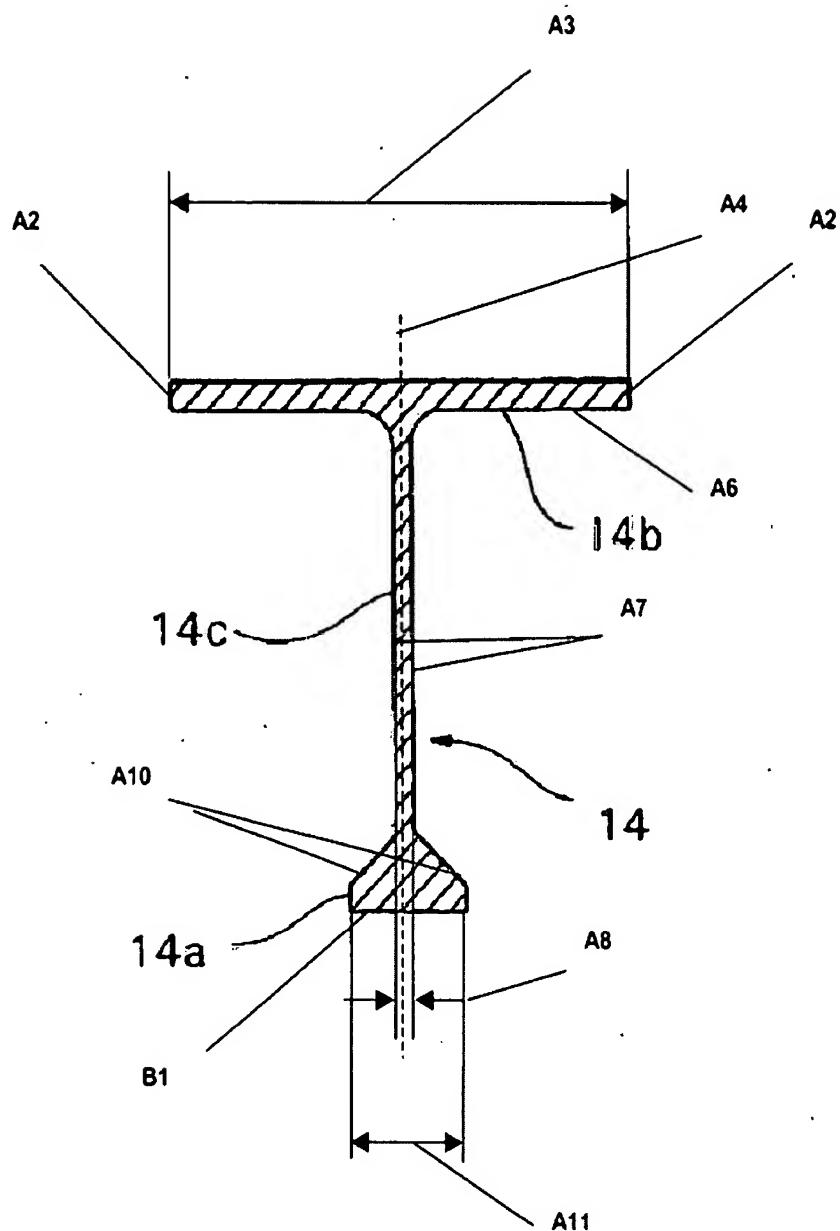
Attorney Docket No.: HWE-107A/0247-5

C. The anchoring device of claim 29 meets the conditions for patentability, and should not be subject to rejection under 35 U.S.C. §103(a) as being unpatentable over US Patent 5,704,181.

The Examiner has rejected claim 29 under 35 U.S.C. §103(a) as being unpatentable over US Patent 5,704,181 to Fisher et al. on the following basis:

Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fisher et al., 5,704,181 (see marked-up attachment). (Office Action of December 29, 2004, page 7, penultimate paragraph.)

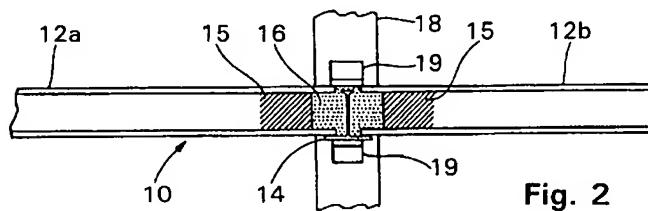
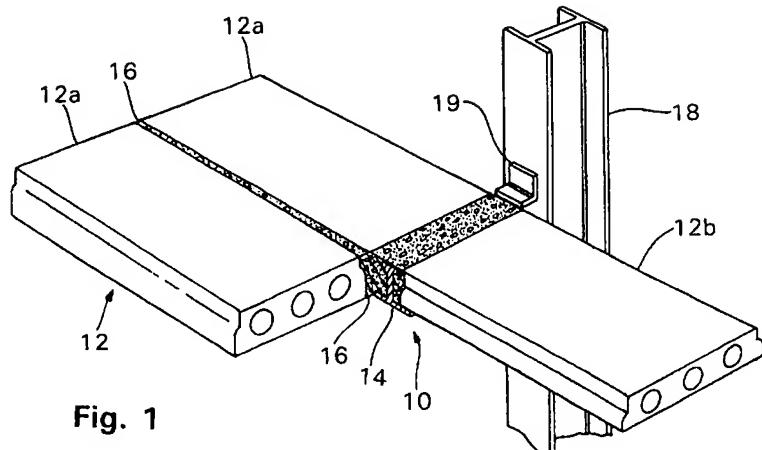
For the convenience of the Board, a copy of the Examiner's marked-up version of Figure 3 of Fisher et al. (provided as page 18 of the Office Action of December 29, 2004) is reproduced below.



(Fisher et al., US Patent 5,704,181, as annotated by the Examiner)

Fisher et al. discloses a structural framing system and associated method for the construction thereof. The framing system is readily visualized in the depictions

of Figs. 1-2 of Fisher et al., which are reproduced below for the convenience of the Board.



(Fisher et al., US Patent 5,704,181)

With reference to Figs. 1-2 and Fig. 3, there is seen specially configured dissymmetric steel beam 14 (details shown in Fig. 3 as reproduced above), which is horizontally disposed and supported between adjacent vertical columns 18 erected on conventional foundations. Framing system 10 further comprises a series of concrete plank sections 12 installed in successive pairs 12a, 12b and joined together along either side of beam 14 using a high-strength grout material 16. Col. 2, lines 46-62. Plank sections 12 are said to be of conventional precast and prestressed, hollow core concrete construction. They are intended to have a substantially uniform thickness ranging from

6 to 12 inches, and span between adjacent structural steel vertical columns 18. Col. 2, lines 63-67. The construction assembly is said to involve first the placement and anchoring of beam 14 in a substantially horizontal position between adjacent vertical columns 18 supported upon, and connected to, seats 19 using conventional structural connection means. Col. 3, lines 36-39. Then the plank sections are placed onto the bottom flange of beam 14, on which they rest. Lines 42-55. The use of a high strength grout 16 is a further required component of the structural system. The grout is premixed and injected so that it completely fills the cavity and totally encases the dissymmetric beam 14. Lines 61-64. Significantly, no flange of beam 14 is received in any groove of the plank sections it supports.

Attention is further drawn to the characterization of the Fisher et al. beam 14 as being a “specially-configured steel dissymmetric beam” (col. 2, lines 52-53). Appellant submits that the qualifying adjective “specially-configured” requires, *inter alia*, particular dimensioning needed to permit the beam 14 to carry out its appointed functions. Specifically, beam 14 is used to support massive concrete planks 12, thereby imposing definite requirements of dimension and strength. Lower flange 14b must be sufficiently wide and thick to permit it to support concrete planks 12a and 12b, which rest upon it, both during the assembly and subsequent to the placement of grouting material 16. Lower flange 14b must also permit the flange to be placed on seats 19, to which flange 14 is connected “using conventional means for making the structural connection thereto” (col. 3, lines 36-38).

1. Independent claim 29 meets the conditions for patentability because Fisher et al. does not disclose or suggest the anchoring device of claim 29.

With respect to claim 29, the Examiner provides the following basis for his rejection:

Regarding claim 29, Fisher et al. disclose, in Figure 3, an anchoring device comprising a substantially flat horizontal top element 14b, at least one substantially vertical support member 14c, and a substantially flat horizontal bottom element 14a. The top element 14b has a top view configuration including two sides A2 and a predetermined first width A3 as measured side to side. The first width A3 is measured at a maximum width between the sides A2. The top element 14b has an imaginary center line A4. The support member 14c is attached to an underside A6 of the top element 14b along the center line A4 and the support member 14c extends downwardly therefrom. The support member 14c has two sides A7 and a predetermined second width A8 as measured side to side at a maximum width. The bottom element 14a has a flat bottom view configuration which includes sides A10 and having a generally trapezoidal shape, and a predetermined third width A11 as measured side to side at a maximum width at a trapezoidal base B1. The first width A3 is greater than the second width A8 and the third width A11. The third width A11 is greater than the second width A8.

However, Fisher et al. fail to disclose the device made of molded plastic material. Applicant is reminded that, within the general skill of a worker in the art, selecting a known material on the basis of its suitability for the intended use is a matter of obvious design choice. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the device of plastic. *In re Leshin*, 125 USPQ 416. Furthermore, it is well known that plastic material is capable of having a metal fastener driven through. (Office Action of December 29, 2004, page 7, last paragraph, through page 8, second paragraph.)

Appellant respectfully submits that the foregoing statement of rejection does not establish *prima facie* obviousness.

a. Independent claim 29 meets the conditions for patentability because Fisher et al. does not disclose or suggest every feature of the anchoring device of claim 29.

There is no disclosure or suggestion in Fisher et al. of the dimensions or functionality of the anchoring device of claim 29. In particular, the Fisher et al. dissymmetric steel beam is not sized to permit it to maintain the top element in a predetermined position during use for joinder of two adjacent boards which have been pre-cut with receiving slots, and to position the bottom element upon a support board which the two adjacent boards rest for attachment of the anchoring device to the support board for anchoring and support of the two adjacent boards. As would be recognized by a person having ordinary skill in the construction arts, decking boards of the type employed in the present invention most commonly have a thickness ranging from about 0.5 to 2 inches thick, whereas the concrete planks employed in the Fisher et al. construction are said to have a substantially uniform thickness which may range from about 6 to 12 inches. Col. 2, line 67 to col. 3, line 1. Put simply, Fisher's planks are vastly larger and heavier. Moreover, nothing in the construction of the dissymmetric structural steel beam 14 of Fisher et al. adapts it to be maintained in the predetermined position recited by claim 29, nor is it appointed for use with adjacent boards which have been pre-cut with receiving slots. The concrete planks 12a, 12b have no such receiving slots or, indeed, slots of any form. Instead, the dissymmetric structural steel beam 14 must be used in conjunction with high-strength grout 16, whereas applicant's decking system employs no such grout.

Still further, attention is respectfully drawn to the Examiner's unacknowledged modification of Fig. 3. In particular, the Examiner has provided Fig. 3 (with superimposed annotations) in a representation wherein the graphical elements have all been inverted with respect to Fisher et al.'s Fig. 3, and the original reference numerals omitted. The original orientation of Fig. 3 places the largest width of beam 14 (denoted as A3 by the Examiner) on the bottom, corresponding to its disposition in the finished construction shown in Figs. 1 and 2. By way of contrast, and without notice, the Examiner has reconstructed Fig. 3, inverting it to place the largest width (i.e. the width of flange 14b) on the top of the altered drawing.⁷ Appellant maintains that "top" and "bottom" as used in the instant specification are terms of ordinary language. They have not been imbued with any special technical meaning, either by applicant or by Fisher et al. or any other prior art reference applied. It is submitted that the examiner's unacknowledged alteration is repugnant to ordinary meaning and thus impermissible, absent clear evidence to substantiate the change or the equivalence of the inverted orientation.

The distinction between "top" and "bottom" is no matter of mere semantics, because the "bottom" of Fisher et al.'s dissymmetric structural steel beam 14 is defined by its function of supporting planks 12a, 12b. Clearly, the inversion of beam 14 in an actual building structure employing the construction depicted by Figs. 1 and 2 of Fisher et al. would have disastrous consequences. Were the Fisher et al. beam installed in the inverted position, it inherently could not support the concrete planks,

⁷ Appellant notes that the deletion of the original reference numerals was likely done to prevent the confusion that would have resulted from their being printed upside down in the annotated Fig. 3.

which would have to rest on an angled surface of the trapezoidal “bottom,” not on a flat surface. Clearly, no skilled artisan would contemplate such a configuration. The Fisher et al. reference does not disclose or suggest any function for dissymmetric structural steel beam 14 used in the inverted position implied by the Examiner’s recasting of Fig. 3.

b. Independent claim 29 meets the conditions for patentability because motivation for the proposed medication of the Fisher et al. disclosure has not been established.

The Examiner has also admitted that Fisher et al. fails to disclose an anchoring device made of a molded plastic material, but contends that it would have been obvious to one having ordinary skill in the art to make the device of plastic, citing *In re Leshin*, 47 C.C.P.A. 909; 277 F.2d 197; 1960 CCPA LEXIS 314; 125 U.S.P.Q. (BNA) 416 (CCPA 1960).

Applicant submits that the Examiner’s reliance on *Leshin* is misplaced, it being the application of a *per se* rule of obviousness ruled impermissible in *In re Ochiai*, 71 F.3d 1565, 1572, 37 USPQ2d 1127, 1133 (1995) (holding that “Reliance on *per se* rules of obviousness [by the USPTO] is legally incorrect and must cease.”)

In the present instance, appellant maintains that a person of ordinary skill in the art would indubitably recognize that it would be impossible to substitute any known plastic for structural steel in the Fisher et al. dissymmetric beam. Substitution of plastic for steel in the Fisher et al. beam would clearly render it inoperative for its

intended purpose, as no plastic structure would conceivably have sufficient strength for it to support 6 – 12 inch thick concrete planks. The Examiner has not pointed to any reasonable motivation for changing the Fisher et al. material, apart from hindsight afforded by the present application. The facts in *Leshin* were altogether different, rendering it inapposite in the present instance. Specifically, the material selection deemed obvious was the selection of a particular plastic to be used in a device for which the prior art generically taught the use of a plastic material. *Id.*, 47 C.C.P.A. 911; 277 F.2d 199 [holding that “Mere selection of known plastics to make a container-dispenser of a type made of plastics prior to the invention, the selection of the plastics being on the basis of suitability for the intended use, would be entirely obvious; and in view of 35 U.S.C. 103 it is a wonder that the point is even mentioned.”] In the present instance, no basis is established for any Fisher et al. beam to be other than structural steel. An obviousness determination is thus precluded under *In re Gordon*, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984).

Furthermore, it would be impossible to drive a metal fastener through the Fisher et al. steel beam, as required by claim 29. Appellant thus maintains that the use of a material through which a fastener can be driven provides a technical function on which patentability may be predicated, and which would be unexpected and surprising in the absence of applicant’s own disclosure.

Appellant respectfully submits that the present anchoring device does not merely represent a different arrangement of structural features of the Fisher et al. steel beam that nevertheless perform the same function. In *KSR v. Teleflex*, 127 S. Ct. 1727, 1741;

167 L. Ed. 2d 705; 2007 U.S. LEXIS 4745; 75 U.S.L.W. 4289; 82 U.S.P.Q.2D (BNA) 1385; (S. Ct. 2007), the Supreme Court focused obviousness inquiry on whether an “improvement is more than the predictable use of prior art elements according to their established functions” (citing *Anderson's-Black Rock, Inc. v. Pavement Salvage Co.*, 396 U.S. 57, 60-62; 90 S. Ct. 305; 24 L. Ed. 258 (S. Ct. 1969) and *Sakraida v. AG Pro, Inc.*, 425 U.S. 273, 282; 96 S. Ct. 1532; 47 L. Ed. 2d 784 (S. Ct. 1976) (emphases added). An obviousness determination is thus precluded.

See also *In re Gal*, 980-F.2d 717, 25 USPQ2d 1076 (Fed. Cir. 1992) wherein a finding of “obvious design choice” was precluded where the claimed structure and the function it performed were different from the prior art. Applicant submits that the anchoring function of the present plastic anchoring device and the support function of the Fisher et al. dissymmetric steel beam are sufficiently different to invoke the *Gal* rule, negating the Examiner’s finding of “obvious design choice.”

Further see *In re Chu*, 66 F.3d 292, 36 USPQ2d 1089, 1095 [Fed. Cir. 1995], holding that Chu's technical evidence relating to the frailty of fabric filters during pulse-jet cleaning clearly counters the assertion that placement of the catalyst in the baghouse is merely a “design choice.” Specifically, the Court held that Chu's evidence regarding the violent “snapping” action during pulse-jet cleaning, the difficulty in stitching compartments including the capacity to withstand high temperatures, and problems encountered from variable path lengths due to settling of the catalyst particles in each compartment militated against a conclusion that placement of the SCR catalyst was merely a “design choice.”

The Federal Circuit has consistently held that obviousness cannot be predicated merely on finding the recited elements in a single references or a combination of references. *Symbol Technologies, Inc. v. Opticon, Inc.*, 935 F.2d 1569, 1576, 19 USPQ2d 1241; (Fed. Cir. 1991) [“We do not ‘pick and choose among the individual elements of assorted prior art references to recreate the claimed invention,’ but rather, we look for ‘some teaching or suggestion in the reference to support their use in the particular claimed combination.’”], quoting *Smithkline Diagnostics, Inc. v. Helena Laboratories Corp.*, 859 F.2d 878,887, 8 USPQ2d 1468, 1475 (Fed. Cir. 1988)].

Applicant respectfully maintains that the Examiner has not adduced any evidence, whether in Fisher et al. itself or elsewhere, that establishes motivation for a skilled artisan to make the particular combination of elements, configured in the manner delineated by the present claims and performing even similar functions, including claim 29. It is thus submitted that the motivation proposed by the Examiner is improper as being a hindsight reconstruction under the test of *In re Rouffet*, 149 F.3d 1350, 1357, 47 USPQ 2d 1453, 1457 (Fed. Cir. 1998):

“ . . . ‘virtually all [inventions] are combinations of old elements.’ *Environmental Designs, Ltd. v. Union Oil Co.*, 713 F.2d 693, 698, 218 USPQ 865, 870 (Fed. Cir. 1983); see also *Richdel, Inc. v. Sunspool Corp.*, 714 F.2d 1573, 1579-80, 219 USPQ 8, 12 (Fed. Cir. 1983) (‘Most, if not all, inventions are combinations and mostly of old elements.’). Therefore an examiner may often find every element of a claimed invention in the prior art. If identification of each claimed element in the prior art were sufficient to negate patentability, very few patents would ever issue. Furthermore, rejecting patents solely by finding prior art corollaries for the claimed elements would permit an examiner to use the claimed invention itself as a blueprint for piecing together elements in the prior art to defeat the patentability of the claimed invention. Such an approach would be ‘an illogical and inappropriate process by which to determine patentability.’” *Sensonics, Inc. v. Aerasonic Corp.*, 81 F.3d 1566, 1570, 38 USPQ 2d 1551, 1554 (Fed. Cir. 1996).

The court has articulated a similar warning in *In re Kotzab*, 55 USPQ 2d 1313, 1318 (Fed. Cir. 2000):

“Further, a rejection cannot be predicated on the mere identification in [the reference] of individual components of claimed limitations. Rather, particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed.”

It is respectfully submitted that the Examiner has not provided any motivation to re-dimension the Fisher et al. dissymmetric steel beam so that it could carry out the function of supporting the decking structure in the configuration delineated by claim 29, apart from the hindsight of the present specification and claims. The need for such a substantial reconstruction is submitted to negate any finding of obviousness. *In re Ratti*, 270 F2d 810, 123 USPQ 349 (C.C.P.A. 1959).

Furthermore, the reconstruction proposed by the Examiner would require elimination of the critical grouting taught by Fisher et al. Applicant’s decking system would be unworkable if installed with grouting in the manner taught by Fisher et al., because the gaps between decking boards that permit collected water to drain would thereby be sealed, creating yet another basis on which the Fisher et al. system would be rendered unsuitable or inoperative for its original purpose, again precluding a finding of obviousness under *Gordon. Supra.*

c. Independent claim 29 meets the conditions for patentability because Fisher et al. is non-analogous art.

Fisher et al. is directed specifically to techniques for construction using precast concrete planks with a steel supporting structure, whereas applicant's claims relate to construction using wood and wood-like decking boards and supporting framing. Appellant respectfully submits that these construction forms, materials, and techniques are so disparate that a skilled artisan would not be motivated to consider the Fisher et al. disclosure as pertinent to the particular problems of attaching decking boards to supporting beams of the type delineated by claims 29-38. Accordingly, it is submitted that Fisher et al. is not properly considered to be analogous art, precluding its use in the present rejection.

2. Conclusion.

In view of the foregoing remarks, it is submitted that present claim 29 patentably defines over Fisher et al. Accordingly, reversal of the rejection of claim 29 under 35 USC §103(a) over Fisher et al. is respectfully requested.

D. The anchoring device of claim 30 meets the conditions for patentability, and should not be subject to rejection under 35 U.S.C. §103(a) as being unpatentable over the combination of US Patents 5,704,181 and 6,442,908.

The Examiner has rejected claim 30 under 35 U.S.C. §103(a) as being unpatentable over US Patent 5,704,181 to Fisher et al. in view of US Patent 6,442,908 to Naccarato et al. on the following basis:

Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fisher et al., 5,704,181, as applied to claim 29 above, and further in view of Naccarato, 6,442,908.

Regarding claim 30, Fisher et al., as modified above, fail [to] disclose the vertical support member 14c having recesses with support columns located therebetween. Naccarato et al. teach, in Figs. 4 and 5, a vertical support member 14c having recesses 15 to promote optimal flow of grout material through the support member (col. 5, lines 29-35). Therefore, as taught by Naccarato et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to include recesses in the vertical support member to promote optimal flow of grout material through the support member. Applicant is reminded that columns will be inherently located between the recesses as shown in Figure 3 of Naccarato et al. (Office Action of December 29, 2004, page 9, third paragraph, through page 10, first paragraph.)

Applicants respectfully note that the same three inventors are named in the Fisher et al. and Naccarato et al. patents, with only the ordering of the three names being different. In addition, Naccarato et al. delineates an overall structural framing system and method that are substantially similar to those of the Fisher et al. disclosure, as is apparent from a comparison of the respective Figs. 1-2 of each patent. Both Fisher et al. and Naccarato et al. disclose a dissymmetric steel beam having generally similar configuration and dimensions. Whereas the Fisher et al. beam is of generally solid

construction, the Naccarato et al. beam has plural spaced, rectilinear or curvilinear openings 15. See col. 4, lines 54-56, of Naccarato et al. and also the respective side and end views of its Figs. 3-4, which are reproduced below for convenience. The openings 15 are said to promote optimal flow of the grout material 16 through and along the beam within the encasement area during construction. Col. 5, lines 31-34. The framing construction and all materials are otherwise similar.

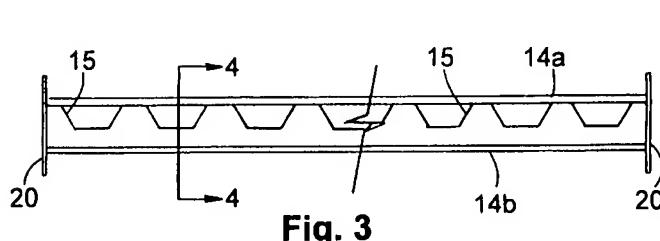


Fig. 3

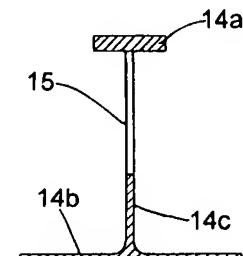


Fig. 4

(Naccarato et al., US Patent 6,442,908)

1. Claim 30 meets the conditions for patentability because Fisher et al. and Naccarato et al., whether taken singly or in combination, do not disclose or suggest every feature of the anchoring device of claim 30.

It is respectfully submitted, for the reasons set forth above, that Naccarato et al. does not materially augment the teaching of Fisher et al. At best, Naccarato et al. discloses perforation of the Fisher et al. dissymmetric steel beam, but it does not otherwise suggest changing its dimensions or basic functioning. The perforation would,

if anything, require increasing the thickness of the remaining portions of the dissymmetric steel beam to compensate for material removed. The overall concrete and steel structures taught by the respective patents are virtually identical. Accordingly, it is submitted that even the addition of Naccarato et al. does not cure the lack of disclosure or suggestion of the anchoring device of claim 29, from which claim 30 depends. Even less does the combination of the references disclose applicant's claimed anchoring device having a plurality of recesses with support columns located therebetween. It is respectfully submitted that the perforated dissymmetric steel beam of Naccarato et al. still does not disclose or suggest the far smaller molded plastic anchoring device of claim 30.

2. Claim 30 meets the conditions for patentability because motivation to combine and modify the Fisher et al. and Naccarato et al. disclosures has not been established.

Appellant has set forth reasons in Section VII.C.2. to establish that there is no motivation to modify any structure provided by Fisher et al. to reach the anchoring device of claim 29. It is respectfully maintained that those reasons apply with equal force to establish that there is no motivation to modify even the combination of Fisher et al. and Naccarato et al. to reach the anchoring device of claim 29, or that of claim 30 dependent therefrom.

The Examiner has contended that it would have been obvious to include recesses in the vertical support member to promote optimal flow of grout material

through the support member. While Naccarato et al. admittedly discloses that a perforated dissymmetric steel beam permits a better grout flow than the solid beam provided by Fisher et al., appellant respectfully submits that this supposed motivation has no pertinence to any anchoring device for decking boards, including that of claims 29 and 30. Clearly, no grouting is disclosed or suggested by the present application. The Examiner has not pointed to any other motivation to suggest the use of the present anchoring device in conjunction with grout. To the contrary, the present decking system would be unworkable, were it to be installed with grouting in the manner taught by Fisher et al. and/or Naccarato et al., because the gaps between decking boards that permit collected water to drain would thereby be sealed.

Even if, *arguendo*, Fisher et al. and Naccarato et al. were combined to provide recesses in the vertical member, the basic configuration shared by these references does not disclose or suggest applicant's basic configuration.

Accordingly, it is submitted that no motivation for the combination of Fisher et al. and Naccarato et al. in the manner proposed by the Examiner has been provided, nullifying the propriety of the present rejection.

3. Claim 30 meets the conditions for patentability because neither Fisher et al. nor Naccarato et al. is analogous art.

The reasons set forth above in Section VII.C.3. with respect to Fisher et al., are submitted to apply with equal force to Naccarato et al., which also discloses a concrete plank and steel frame structure completely unlike the decking and support

delineated by applicant. Accordingly, it is submitted that neither Fisher et al. nor Naccarato et al. is properly considered art analogous to claim 30, rendering their use in the present obviousness rejection of claim 30 improper.

4. Conclusion.

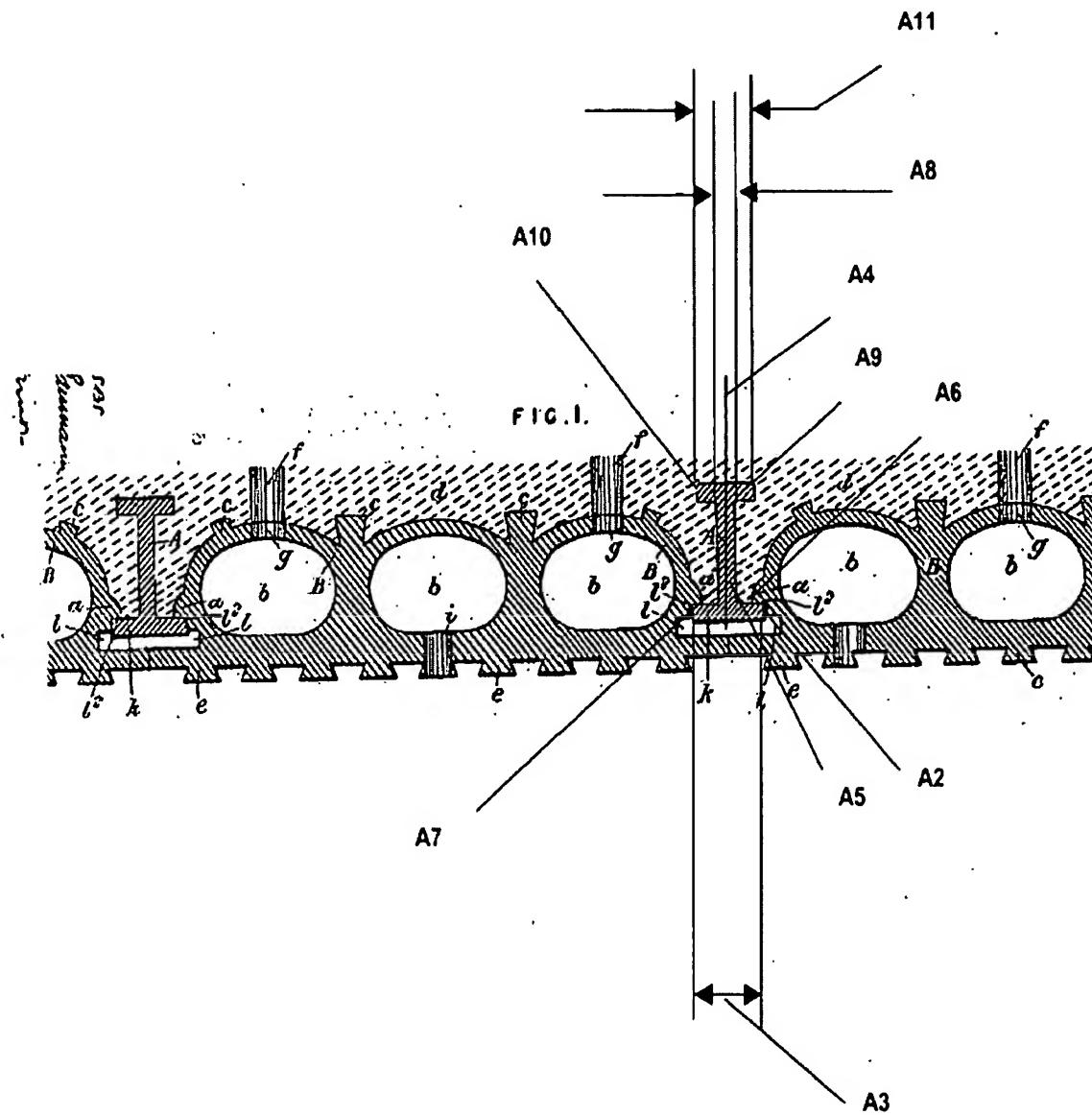
In view of the foregoing remarks, it is submitted that present claim 30 patentably defines over Fisher et al. in view of Naccarato et al. Accordingly, reversal of the rejection of claim 30 under 35 USC §103(a) over Fisher et al. in view of Naccarato et al. is respectfully requested.

E. The decking system of claim 33 meets the conditions for patentability, and should not be subject to rejection under 35 U.S.C. §103(a) as being unpatentable over the combination of US Patents 556,998 and 5,704,181.

The Examiner has rejected claim 33 under 35 U.S.C. §103(a) as being unpatentable over US Patent 556,998 to Major in view of US Patent 5,704,181 to Fisher et al. on the following basis:

Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Major, 556,998 (see marked-up attachment), in view of Fisher et al., 5,704,181. (Office Action of December 29, 2004, page 10, second paragraph.)

For the convenience of the Board, a copy of Figure 1 of Major, including the aforementioned markings added by the Examiner and furnished as page 17 of the Office Action of December 29, 2004, is reproduced below.



(Major, US Patent 556,998, as annotated by the Examiner)

Major is directed to a fireproof and ventilating floor construction. Referring to Fig. 1 above, items A are said to be "ordinary metal girders of I-section, supported at their ends on piers or on the walls of the building." Page 1, col. 1, lines 22-25. Items B are lintels molded in clay, concrete, or other fire-resisting material. Lines 25-28. The lintels are of a length to reach from center to center of the lower flanges of two adjacent girders A. Formed in the upper surfaces of the lintels are undercut projections c, which are said to serve to key the lintel to concrete d, which fills the space between the girders and covers the whole of the upper sides of the linters and girders A to form the finished floor surface.

The Examiner makes the following assertion in rejecting claim 33:

Regarding claim 33, Major, discloses, in Figure 1, a decking system comprising boards B and an anchoring device A. Each of the boards B has a top e, a bottom c, two sides I2 and two ends (Fig. 2A). At least one groove I is located along one of the sides I2. The anchoring device A consists essentially of a substantially flat horizontal top element k, at least one substantially vertical support member A5, and a substantially flat horizontal bottom element A9. The top element k has a top view configuration including two sides A2 and a predetermined first width A3 as measured side to side. The first width A3 is measured at a maximum width between the sides A2. The top element k has an imaginary center line A4. The support member A5 is attached to an underside A6 of the top element k along the center line A4 and the support member A5 extends downwardly therefrom. The support member A5 has two sides A7 and a predetermined second width A8 as measured side to side at a maximum width. The bottom element A9 has a flat bottom view configuration, which includes sides A10, and a predetermined third width A11 as measured side to side at a maximum width at a base. The first width A3 is greater than the second width A8 and the third width A11. The third width A11 is greater than the second width A8.

However, Major fails to disclose, the bottom element A9 having a generally trapezoidal shape, and making the anchoring device A of molded plastic material.

Fisher et al. teach, in Figure 3, a bottom element 14a of an anchoring device consisting essentially of a trapezoidal shape to have a dissymmetric anchoring device so that it increase load-bearing capacity (col. 4, lines 17-36). Therefore, as taught by Fisher et al., it would have been obvious to one of ordinary skill in the

art at the time the invention was made to configure the bottom element having a generally trapezoidal shape so that the anchoring device has a dissymmetric shape to increase load-bearing capacity. Note, the base will be a trapezoidal base due to the horizontal bottom element having a trapezoidal shape.

In regards to the material, applicant is reminded that, within the general skill of a worker in the art, selecting a known material on the basis of its suitability for the intended use is a matter of obvious design choice. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the device of plastic. *In re Leshin*, 125 USPO 416. Furthermore, it is well known that plastic material is capable of having a metal fastener driven through. (Office Action of December 29, 2004, page 10, third paragraph, through page 11, third paragraph.)

1. Independent claim 33 meets the conditions for patentability because Major and Fisher et al., whether taken singly or in combination, do not disclose or suggest every feature of the decking system of claim 33.

Contrary to the contention of the Examiner, appellant maintains that Major and Fisher et al. fail to disclose or suggest all the features delineated by claim 33. Appellant specifically traverses certain identifications made in the foregoing statement of rejection as requiring an untenable re-definition of the terms "top" and "bottom" recited in the instant specification and claims. It is submitted that no special technical meaning has been given to these terms in the specification and no indication has been given in the specification that the terms are used in other than their ordinary directional sense.

The foregoing statement rejecting claim 33 associates "top" with elements "e" and "k" and "bottom" with elements "c" and "A9," even though element "c" is depicted as being above element "e" and element "A9" is above element "k" in Fig. 1.

Furthermore, the floor surface of the system of Fig. 1 is provided by concrete "d." On the other hand, the Examiner's reading of Major requires an inversion of the ordinary meanings of "top" and "bottom," so that "bottom" is closer to the floor surface than "top," both for "boards" B (which allegedly have "top" e and "bottom" c) and "anchoring device" A (which allegedly has "top" k and "bottom" A9). This understanding is submitted to be repugnant to ordinary use of language. Appellant submits that in the absence of any evidence to substantiate this inversion, the Examiner's reading is wholly untenable.

Appellant respectfully points to still other distinctions between the structure depicted by Fig. 1 above and the decking system of claim 33. The Examiner's contention that the clay, concrete, or fire resistant material elements called lintels B by Major are the decking boards of claim 33, feature (I.), is traversed. Clearly, lintels B do not provide any exposed surface. Instead, they are covered with concrete "d" and so would not be regarded as being "decking boards" by a skilled artisan. Beams "A" are said to be "ordinary metal girders of I-section supported at their ends on piers or on the walls of the building" (page 1, col. 1, lines 22-25), whereas the anchoring devices of claim 33 include a bottom element that is positioned upon a support board. The Examiner has failed to identify any such support board in the structure of Major, let alone a support board on which lintels/"decking boards" B rest, as required by claim 33. Instead, lintels B are supported by the extended-length girder A.

For the reasons set forth above, a skilled artisan would not recognize the extended-length girder A, which necessarily must reach between its points of support at

piers or walls of the building, as being an anchoring device. Such a length would defeat the purpose of installing decking boards with intervening gaps to permit water drainage. Major clearly does not contemplate any need for water drainage, since the floor structure is used for ventilation. The only penetrations through the surface are into the hollows of the lintels, through which air is appointed to flow. No other drainage is provided. In addition, the Major girder clearly could not be made of plastic, as the Examiner contended, and still have sufficient strength to support lintels B.

2. Claim 33 meets the conditions for patentability because motivation to combine and modify the Major and Fisher et al. disclosures has not been established.

The Examiner has contended that it would be obvious to configure the bottom element to have a generally trapezoidal shape “so that the anchoring device has a dissymmetric shape to increase load-bearing capacity.” However, no evidence is adduced to substantiate the claim that a trapezoidal base or a dissymmetric shape would, in fact, produce such an increased load-bearing capacity. The Examiner has identified the “bottom” of the purported anchoring device in Major’s Fig. 1 as being that portion closest to the surface of concrete floor d. It is not apparent to appellant, and the Examiner has not established or substantiated the assertion, why it would be clear to a skilled artisan that a dissymmetric or trapezoid-containing form would be preferred in this configuration, or even why these features would provide the purportedly obvious increase in strength. Rather, appellant submits that the contention

is based purely on hindsight reconstruction in which the instant specification has been used improperly as a teacher against itself. [“To imbue one of ordinary skill in the art with knowledge of the invention in suit, when no prior art reference or references of record convey or suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher.” *W.L. Gore & Assocs., Inc. v. Garlock, Inc.*, 220 USPQ 303, 312–13 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984), emphasis added.]

In addition, even if the Major I-beam were to be modified in accordance with the Fisher et al. disclosure, any trapezoidal portion of the beam would be located at the part of the beam closest to the floor surface, not at the bottom of the anchoring device, as delineated by claim 33. Such would not be the same arrangement of the elements as set forth in claim 33, as required under *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co., supra*.

Applicant also traverses the contention that it would have been obvious to substitute any plastic structure for the steel I-beam girders taught by Major and Fisher et al., based on *In re Leshin*. Clearly, a plastic beam is not a feasible replacement for a steel I-beam in the structures of Fisher et al. or Major. No plastic structure would support the concrete floor or other components that would be included in any building construction disclosed or suggested by Major and Fisher et al. whether taken singly or in combination. Accordingly, it is submitted that the modification would render the structures of Fisher et al. and Major inoperative for their intended purpose, precluding an obviousness determination for the reasons also set forth above in Section VI.C.1.b

3. Claim 33 meets the conditions for patentability because neither Major nor Fisher et al. is analogous art.

In Section VII.C.3. above, appellant has set forth reasons why Fisher et al. is not analogous art for Claim 33. Appellant respectfully submits that Major is also not analogous art, it being directed to a construction form employing steel supports, a concrete finished floor surface, and structural lintel members of clay, concrete or other fire-resistant material, which are all very different in their properties, weight, and strength than the decking boards and anchoring device used in the decking system of claim 33. Accordingly, it is submitted that a person having ordinary skill in the art would have no motivation to look to Major and Fisher et al., whether singly or in combination, for decking structures and construction techniques, rendering the references non-analogous.

4. Conclusion.

In view of the foregoing remarks, it is submitted that present claim 33 patentably defines over Major in view of Fisher et al. Accordingly, reversal of the rejection of claim 33 under 35 USC §103(a) over Major in view of Fisher et al. is respectfully requested.

F. The decking system of claim 34 meets the conditions for patentability, and should not be subject to rejection under 35 U.S.C. §103(a) as being unpatentable over the combination of US Patents 556,998, 5,704,181, and 6,442,908.

The Examiner has rejected claim 34 under 35 U.S.C. §103(a) as being unpatentable over US Patent 556,998 to Major in view of US Patent 5,704,181 to Fisher et al. and further in view of US Patent 6,442,908 to Naccarato et al. on the following basis:

Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Major, 556,998, in view of Fisher et al., 5,704,181, as applied to claim 33 above, and further in view of Naccarato, 6,442,908.

Regarding claim 34, Major, as modified above, fails [to] disclose the vertical support member having recesses with support columns located therebetween. Naccarato et al. teach, in Figs. 4 and 5, a vertical support member 14c having recesses 15 to promote optimal flow of grout material through the support member (col. 5, lines 29-35). Therefore, as taught by Naccarato et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to include recesses in the vertical support member to promote optimal flow of grout material through the support member. Applicant is reminded that columns will be inherently located between the recesses as shown in Figure 3 of Naccarato et al. (Office Action of December 29, 2004, page 12, second and third paragraphs.)

1. Claim 34 meets the conditions for patentability because Major, Fisher et al., and Naccarato et al., whether taken singly or in combination, do not disclose or suggest every feature of the decking system of claim 34.

Appellant submits that the reasons set forth hereinabove in Section VII.E.2 to establish that claim 33 is patentable over the combination of Major and

Fisher et al. apply with equal force to the rejection of claim 34, which depends from base claim 33. A comparison is respectfully drawn between the limitation recited in claim 34, which recites a preferred form of the anchoring device used in the decking system of base claim 33, and the similarly-worded limitation recited in claim 30 drawn to a preferred form of the anchoring device of base claim 29. As set forth in Section VII.D.1., Naccarato et al. is directed to a construction substantially similar to that of Fisher et al., and does not cure the lack of disclosure of the claimed anchoring device delineated by claims 29 and 30. The Examiner's reasoning for asserting that Naccarato et al. in combination with Major and Fisher et al. defeats claim 34 is similar to his argument for using Naccarato et al. and Fisher et al. in rejecting claim 30. To the contrary, Appellants maintain the argument fails with respect to claim 34, for the same reasons set forth above to demonstrate it fails with respect to claim 30.

2. Claim 34 meets the conditions for patentability because motivation to combine and modify the Major, Fisher et al., and Naccarato et al. disclosures has not been established.

Appellant respectfully submits that the same reasons that establish that there is no motivation to combine Fisher et al. and Naccarato et al. to reach the subject matter of claim 30 apply with equal force to the addition of Naccarato et al. to the combination of Major and Fisher et al. with respect to the preferred decking system of claim 34 and base claim 33 from which claim 34 depends.

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3. Claim 34 meets the conditions for patentability because neither Major, Fisher et al., nor Naccarato et al., is analogous art.

Appellant respectfully submits that the same reasons set forth in Sections VII.C.3, VII.D.3, and VII.E.3 to establish that Major, Fisher et al. and Naccarato et al. are not directed to analogous art apply with equal force to the combination of these references as applied to claim 34.

4. Conclusion.

In view of the foregoing remarks, it is submitted that present claim 34 patentably defines over the combination of Major, Fisher et al., and Naccarato et al. Accordingly, reversal of the rejection of claim 34 under 35 USC §103(a) over Major in view of Fisher et al. and further in view of Naccarato et al. is respectfully requested.

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(VIII) Conclusion

In light of the foregoing remarks, it is respectfully submitted that the anchoring device of claim 29 (and claims 30-32 dependent thereon); and the decking system of claim 33 (and claims 34-38 dependent thereon) are not disclosed or suggested by any combination of the art references applied, and thus meet the conditions for patentability required by 35 U.S.C. §§ 102 and 103(a).

Accordingly, reversal of the rejection of claims 29, 31, 32 under 35 USC §102(b); claims 33 and 35-38 under 35 USC §102(e); and claims 29, 30, 33, and 34 under 35 USC §103(a), and allowance of the present application, are earnestly solicited.

Respectfully submitted,

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(IX) Claims Appendix — Claims On Appeal

1-10. (cancelled).

11-21. (withdrawn).

22-28. (cancelled).

29. An anchoring device for joining three boards, which consists essentially of:

- (a) a substantially flat horizontal top element having a top view configuration which includes two sides and has a first predetermined width as measured side to side, said first predetermined width being measured at a maximum width between said two sides, said top element having an imaginary center line;
- (b) at least one substantially vertical support member attached to an underside of said top element along said imaginary center line of said top element and extending downwardly therefrom for a predetermined length, said substantially vertical support member having two sides and a second predetermined width as measured side to side at a maximum width; and,
- (c) a substantially flat horizontal bottom element having a flat bottom view configuration which includes two sides and having a generally

trapezoidal shape, and having a third predetermined width as measured side to side at a maximum width at a trapezoidal base;

wherein said first predetermined width is greater than both said second predetermined width and third predetermined width, and wherein said third predetermined width is greater than said second predetermined width, and said anchoring device is adapted to maintain said top element in a predetermined position during use for joinder of two adjacent boards which have been pre-cut with receiving slots, and to position said bottom element upon a support board which said two adjacent boards rest for attachment of said anchoring device to said support board for anchoring and support of said two adjacent boards; and,

further wherein said device is made of molded plastic material capable of having a metal fastener driven therethrough.

30. The anchoring device of claim 29 wherein said vertical support member has a plurality of recesses with support columns located therebetween.

31. The anchoring device of claim 29 wherein said top element two sides are symmetric relative to one another.

32. The anchoring device of claim 29 wherein said top element two sides are parallel to one another.

33. A decking system which comprises:

- I. a plurality of decking boards, each decking board having a top, a bottom, two sides, and two ends, and at least one groove located along one of said sides, said groove adapted to receive an anchoring device; and
- II. an anchoring device which consists essentially of:
 - (a) a substantially flat horizontal top element having a top view configuration which includes two sides and has a first predetermined width as measured side to side, said first predetermined width being measured a maximum width between said sides, said top element having an imaginary center line;
 - (b) at least one substantially vertical support member attached to an underside of said top element along said imaginary center line of said top element and extending downwardly therefrom for a predetermined length, said substantially vertical support member having two sides and a second predetermined width as measured side to side at its maximum width; and
 - (c) a substantially flat horizontal bottom element having a flat bottom view configuration which includes two sides and having a generally trapezoidal shape, and having a third predetermined width as measured side to side at its maximum width at a trapezoidal base;
wherein said first predetermined width is greater than both said second predetermined width and third predetermined width, and wherein said

third predetermined width is greater than said second predetermined width, and said anchoring device is adapted to maintain said top element in a predetermined position during use for joinder of two adjacent boards which have been pre-cut with receiving slots, and to position said bottom element upon a support board which said two adjacent boards rest for attachment of said anchoring device to said support board for anchoring and support of said two adjacent boards; and,

further wherein said anchoring device is made of molded plastic material capable of having a metal fastener driven therethrough.

34. The decking system of claim 33 wherein said vertical support member of said anchoring device has a plurality of recesses with support columns located therebetween.

35. The decking system of claim 33 wherein said top element two sides are symmetric relative to one another.

36. The decking system of claim 33 wherein said groove establishes an upper half of each said board above said groove and a lower half of each said board below said groove, wherein said upper half has a greater width than said lower half.

37. The decking system of claim 33 wherein said plurality of decking boards are made of materials selected from the group consisting of synthetic polymers, at least partially foamed synthetic polymers, wood, wood composite, and combinations thereof.

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38. The decking system of claim 33 wherein said top element two sides are parallel to one another.

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(X) **Evidence Appendix**

Not applicable.

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(XI) Related Proceedings Appendix

Not applicable.